

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017808**Date Inspected:** 25-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 11

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW tack welding of weld joints BK004A2-018-014, 015, 017, 019 located on PCMK OBG BK004-018, bottom plate plug welds. Welders were identified as 053316, 202340. QC was identified as Yu Dong Ping (QC1). Welding variables recorded by QC1 appeared to comply with WPS-B-T-2132-2-plug as identified by QC1.

Bay 10

This QA Inspector randomly observed no welding related work in progress in Bay 10. ZPMC QC Li Lun confirmed that no welding work would be performed in Bay 10 on this night.

OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

FCAW welding of weld joints SP782-001-025~036, SP783-001-001~012, 022 located on PCMK OBG 11BW/11CW, south (crossbeam) side, holdback welds at transverse joint, side plate to T-stiffener web. Welder was identified as 040736. QC was identified as Liu Hua Jie (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu (QCA2), who was not a CWI.

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Welding variables recorded by QCA2 appeared to comply with WPS-B-T-2132.

FCAW welding of weld joints SP141-001-025~036, SP168-001-025~036, SP142-001-001~012, SP169-001-001~012 located on PCMK OBG 11BW/11CW, north (counterweight) side, holdback welds at transverse joint, side plate to T-stiffener web. Welder was identified as 052486. QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-B-T-2132.

Heavy Dock

This QA Inspector randomly observed the following on the Heavy Dock:

All 4 towers, lift 4 were positioned on a base separate pedestal at end of the Heavy Dock. No work was being performed on any of the tower components and no ZPMC floating cranes were moored to the Heavy Dock or in the area.

Blast Shop 2

ZPMC requested Caltrans personnel to perform visual inspections of south tower, lift 3 from the bottom end at 83M elevation to the top of 99M double diaphragm. At approximately 0400 hours to 0450 hours, following the initial blast cleaning of the steel surfaces, 2 other QA Inspectors and this QA Inspector performed random visual inspections of these areas. ABF and ZPMC Inspectors were present and performing visual inspections of the areas noted above. An ABF representative (BABF) informed this QA Inspector that he would be documenting all weld repairs and would provide this the QA Inspectors with a copy of the documentation. This QA Inspector visually observed several areas that required grinding to resolve visual weld spatter, arc strikes, shallow nicks, scrapes, rough edges of unground welds, and sharp edges of ground welds. These areas were clearly marked with chalk as either "grind" or "grind and perform magnetic particle testing (MT)" using the letter G or the letters G+MT, respectively. This QA Inspector was notified that the above noted areas had been ground and MT had been performed. This QA Inspector randomly visually verified that the work had been performed. All locations were documented by ZPMC QC Inspectors and BABF. A copy of the documentation was presented to the QA Inspectors.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

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Inspected By: Goulet, George

Quality Assurance Inspector

Reviewed By: Carreon, Albert

QA Reviewer